



BOROUGH OF BATLEY.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1899.

BATLEY:

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TO THE BATLEY URBAN SANITARY AUTHORITY.

GENTLEMEN,

I have the honour to submit for your consideration, my Fifth Annual Report on the health of the Borough.

The Borough of Batley comprises an area of 2,039 acres inhabited by a population of 28,719 at the last census, and estimated by me, on the basis of the number of inhabited houses, to be 32,443 for 1899. The density of the population of the whole Borough, in round numbers, is 15 persons to the acre. In the North Ward, it is 11 persons to the acre, in the East 34, and in the West 12. The population of the East Ward is by far the densest of any part of the town.

With a clay subsoil and an unwooded contour, this tract of country is in winter so cold from its moisture laden atmosphere, and its windswept bleakness, that the greatest care is required in the matter of clothing. A cold and damp winter, I have always found produces far more sickness than a long continued frost, and a cool cloudy summer, such as 1894, is as a rule much healthier, although not so pleasant, as a hot dry summer which is invariably accompanied about August by a heavy mortality from Diarrhoea. I am perfectly certain that the extensive planting of quickly growing and hardy trees, fit to resist smoke, would have a distinctly mollifying effect upon the rigours of our climate, firstly by producing a certain amount of shelter, and secondly by absorbing moisture from the soil and from the atmosphere. By this, I mean the establishment of plantations in such localities as would be serviceable for breaking the effect of prevailing winds. Anything which would mitigate the moisture of our atmosphere would be of great Sanitary service. Such a thing as sitting outside, except in the hottest and driest summer weather, is not to be practised without danger, although it is quite safe in some places where the atmosphere is colder but much drier.

The following Table, kindly furnished by the Borough Engineer, gives particulars of the Rainfall in Batley during 1899:—

TABLE No. I.

January.....	3.71 inches
February	1.16 „
March	1.14 „
April.....	1.96 „
May	2.97 „
June	1.42 „
July	1.39 „
August	1.13 „
September.....	4.15 „
October.....	2.36 „
November.....	1.93 „
December.....	2.28 „
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Total	<u>25.6</u> „

The Rainfall for 1899 is above the average. That for 1896 was 21.4, for 1897, 23.7, and for 1898, 21.4.

RETROSPECT OF THE YEAR 1899.

TABLE No. II.

This Table shows the number of Births, and the Birth Rate in each Month:—

Month	Males	Females	Total	Rate
January..	37	41	78	28.8
February	33	37	70	25.8
March.....	37	33	70	25.8
April.....	52	48	100	36.9
May.....	35	36	71	26.2
June.....	39	28	67	24.7
July.....	31	50	81	29.9
August....	31	29	60	22.1
September	33	40	73	26.9
October...	34	39	73	26.9
November	27	35	62	22.9
December	28	34	62	22.9
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	417	450	867	

The Monthly Birth Rates have varied from 36.9 per 1000, in April, to 22.1 in August.

This Table shows the number of Deaths, the Death Rate Infantile, Respiratory, Tubercular, and Other Diseases Rates in each month of the year:—

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TABLE No. III.

Month	Males	Females	Total	Rate	Zymotic Rate	Infantile Rate	Respiratory Rate	Tubercular	Other Diseases
						per 1000 born			
Jan.	21	20	41	15.1	1.5	89	1.8	1.8	10.0
Feb.	17	19	36	13.2	0.6	100	1.8	1.8	8.5
Mar.	25	35	60	22.1	0.3	157	4.8	2.7	14.3
April	24	22	46	17.0	0.7	140	3.6	2.2	10.5
May	13	22	35	12.8	0.3	154	1.8	1.8	8.9
June	16	11	27	10.0	0.3	59	2.2	0.7	6.8
July	14	16	30	10.9	1.4	135	0.0	1.8	7.7
Aug.	21	35	56	20.7	11.3	516	0.7	0.3	8.4
Sept.	27	28	55	20.3	6.2	383	1.4	0.7	12.0
Oct.	26	27	53	19.5	4.4	123	4.8	2.5	7.8
Nov.	23	13	36	13.2	0.7	145	2.5	2.5	7.5
Dec.	21	28	49	18.1	1.0	129	3.3	2.2	11.6
Union Deaths	9	5	14						
Asylum Death	1		1						
	258	281	539						

The *Monthly Death Rates* have varied from 22.1 per 1000 in March, to 10.0 per 1000 in June. The heavy mortality in March was due to Influenza and Chest Diseases.

The *Zymotic Rate* varied from 11.3 per 1000 in August, (Diarrhoea prevalent) to 0.3 in March, May and June.

The *Infantile Rate* varied from 516 per 1,000 born in August, (Diarrhoea prevalent) to 59 per 1,000 born in June.

The *Respiratory Rate* has varied from 4.8 in March and October, to nil in July when not a single death from Bronchitis and Pneumonia took place.

The *Tubercular Rate* varied from 2.7 per 1000 in March to 0.3 in August.

June was the record month for favourable statistics, and July came next, both dry months with but small rainfall.

The following Tables show the number of Births and Deaths and their respective rates per 1000, for the four quarters of the year 1899:—

BIRTHS.		BIRTH RATES.	
1st Quarter.....	218	26·8	per 1000
2nd „	238	29·3	„
3rd „	214	26·3	„
4th „	197	24·2	„
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867			
DEATHS.		DEATH RATES.	
1st Quarter.....	137	16·8	per 1000
2nd „	108	13·3	„
3rd „	141	17·0	„
4th „	138	17·0	„
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In concluding these records of the various months, it may be pointed out that statistics for short periods, are of comparatively little value. It is only on an annual, half-yearly, or quarterly report, that any definite conclusions can be built.

ANNUAL STATISTICS.

Births.

During 1899, there were registered 867 Births, (417 Males and 450 Females) equivalent to a Birth Rate of 26·7 per 1000, as compared with 26·7 per 1000 the Rate for 1898, and 27·9 per 1000, the average rate for the ten years beginning 1890. We are thus below the average, and the rates for 1898-9 are the two lowest for the ten years.

Still Births.

Forty Still Births were recorded at Batley Cemetery. It is to be hoped that a proper system for the registration of Still Births, as well as for that of the Deaths, of premature children will be instituted before long. The present system panders to criminal designs in the case of the former, and the inclusive of the latter in the Registrar's weekly mortality returns swells the Infantile Death Rate, and gives a fictitious inflation to it. Both these varieties of births and deaths should be entered on a separate register.

Deaths.

During 1899, there were registered—539 deaths, 258 Males and 281 Females,—14 of these occurred in the Dewsbury Union Workhouse, of persons who belonged to Batley, and one death occurred in the West Riding Asylums of a man originally belonging to Batley. The deaths of non-residents who died in Batley District Hospital, have already been deducted.

The Death Rate for 1899 was 16·6 per 1000, as compared with 17·4 per 1000 in 1898, and 19·6, the average annual Death Rate for the ten years beginning 1890, so that we are

Death Rates and
Comparison with
other Years.

well under the average. So far as is known, this is the best annual Death Rate recorded in the history of the Borough, the next best being 1894, when the rate was 16.9. The Death Rate for England and Wales for 1899, was 18.3 per 1000, so that we stand very well.

TABLE No. IV.

Analysis of Death Rate. The following Table shows the exact composition of the *Death Rate from All Causes*:—

	Deaths	Rate
Zymotic Diseases.....	81 ...	2.496 per 1000
Respiratory Diseases:Bronchitis		
Pneumonia and Pleurisy.....	83 ...	2.558 „
Phthisis (Consumption) and		
Tubercular (Wasting) Diseases	66 ...	2.034 „
Heart Disease.....	38 ...	1.171 „
Other Diseases.....	271 ...	8.353 „
	<u>539</u>	<u>16.612</u>

Zymotic Deases. There were 81 Deaths from Zymotic Diseases, equivalent to a rate of 2.4 per 1000, as compared with 3.0 per 1000 in 1898, and 3.1 per 1000, the average Zymotic Rate for the past ten years. The Zymotic Rate for 1899 is thus well under the average.

TABLE No. V.

Analysis of Zymotic Rate. The following Table shows the exact Composition of the *Zymotic Death Rate*:—

	Deaths	Rate
Searlatina.....	2 ...	0.06 per 1000
Diphtheria and Croup.....	7 ...	0.21 „
Continued Fever.....	1 ...	0.03 „
Typhoid Fever.....	15 ...	0.46 „
Whooping Cough.....	3 ...	0.09 „
Diarrhoea and Dysentery.....	53 ...	1.62 „
	<u>81</u>	<u>2.47</u>

From the above analysis, it will be observed that we had not a single Death either from Small Pox or Measles, and only two deaths from Searlatina. It will be noticeable also, that Diarrhoea, (1.6 per 1000), Typhoid, (0.4 per 1000), and Diphtheria and Croup(0.2 per 1000),were the leading factors in swelling the rate. Diarrhoea absorbed 1.6, the other Zymoties only giving a rate of 0.8 per 1000, which is a remarkably low figure indeed.

Comparing the Zymotic Rate for the last five years, we find the following facts:—

In 1895, Diarrhœa predominated.

1896, Measles, Diarrhœa, and Whooping Cough.

1897, Diarrhœa, Whooping Cough, and Scarlatina.

1898, Diarrhœa, Whooping Cough, and Typhoid.

1899, Diarrhœa, Typhoid, and Diphtheria.

In four of the years, Diarrhœa was the predominant malady, but the others placed in order of highest mortality varied in their occurrence considerably. It is thus observed that there is a sort of cycle of infectious disease, when we look over a period of years, varying with the varying seasons. After a hot summer like last, Diarrhœa and Typhoid were certain to appear. It will be found on reference to the Local Government Board returns, that these two diseases have been rampant in every thickly populated district of the Kingdom.

Diarrhœa. I have alluded to this disease, and the measures used to prevent its spread in my monthly reports at a great length, and it is useless to again repeat them.

Typhoid Fever. During the year of 1899, we have had 15 deaths from the above disease. In February, April, May, and July, there were no Typhoid Deaths. Since August set in, we have had 12 deaths. During that period (Aug. 1st to Dec. 31st), 61 cases of this disease were notified. Of these, 19 per cent died as compared with 11 per cent in the same period of 1898. In 1898, we had 98 notifications of Typhoid in the same period (Autumnal five months), but the mortality was not so heavy as in 1899, when the disease attacked more adults. According to authorities on this disease, the mortality is from 15 to 25 per cent of the persons attacked, so that the disease has evidently assumed a normal type.

Influenza. In 8 of the months during 1899, deaths were recorded due to Influenza. There were 15 deaths from this disease, as compared with 6 in 1898. The disease was epidemic in March and April, but even in the Autumn months, it never seemed to be entirely absent, and has culminated again in a wide spread epidemic in Jan. and Feb. of 1900. The Influenza Death Rate for 1899, was 0·4 per 1000, as compared with 0·1 per 1000 in 1898. During the period of March and April, when the disease was epidemic, the combined death rate from Influenza and Chest Diseases was 5·5 per 1000, as compared with 29·8 per 1000 in May 1891, 15·0 per 1000 in March 1895, and 5·9 per 1000 in March and April 1898. This disease is not to be trifled with, and it cannot be too strongly urged upon the public, to at once place themselves under medical treatment as soon as they feel the symptoms coming on.

TABLE No. VI.

Age at Death . This Table shows the age at Death :—

			1898.	1899.
Deaths under 1 year	...	...	138	148
„ 1 year and under 5 years	...	...	88	62
„ 5 „ „ 15 „	...	...	25	24
„ 15 „ „ 25 „	...	...	27	26
„ 25 „ „ 65 „	...	...	182	185
„ 65 „ and upwards	...	...	96	94
			<u>556</u>	<u>539</u>

In 1899, there were 148 children died under 1 year of age, equivalent to an Infantile Death Rate of 170 per 1000 born, as compared with 161 per 1000 born in 1898. For the ten years commencing 1890, the Infantile Rate was 190 per 1000 born. About half of this year's Infantile Deaths took place during the months of July, August, and September, the majority of them from Diarrhoea. During the past year our Sanitary Authority, (St. Helens) has provided humanized milk, so as to enable mothers who are unable to suckle their children to give them a good imitation of mothers milk. Many cheap and effective agents are now sold by some of the more enlightened of our manufacturing chemists, and the day of dirty feeding bottles and screaming infants griped with curded milk, is fast approaching a close.

VITAL STATISTICS FOR THE YEAR 1899.

1899.	Eng- land and Wales.	Thirty- three Great Towns.	Sixty- seven other Large Towns.	Eng- land and Wales less the 100 Towns.	Batley.
Birth Rate ...	29·3	—	—	—	26·7
Death Rate ...	18·3	20·2	18·0	17·1	16·6
Zymotic Death Rate	2·21	2·81	2·45	1·71	2·4
Infantile Mortality	163	181	178	124	170

This Table gives an analysis of deaths during each month of the year:—

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TABLE No. VII.

	Jan.	Feb.	Mar.	April	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Small Pox												2
Measles ...	...			1									7
Scarlatina ...	1												3
Diphtheria and Mem- branous Croup ...	3	1		1	1		1	1					7
Whooping Cough ...	...	1					1						3
Continued } Typhus Fever } Typhoid	1		1			1		2	1	4	2	3	15
Doubtful							2	28	15	8			1
Diarrhea & Dysentery													53
Total from Zymotics ...	5	2	1	2	1	1	4	31	17	12	2	3	81
Erysipelas ...	...		1								1	1	3
Phthisis and Tubercu- lar Diseases ...	6	6	11	6	6	3	5	1	2	7	7	6	66
Bronchitis & Pneumonia	6	6	15	10	5	6		2	4	13	7	9	83
Puerperal Fever ...	...				1					1	1		3
Rheumatic Fever ...	...	1					1				1		3
Heart Disease ...	5	4	5	2	2	4	1		5	2	1	7	38
Total other causes ...	19	18	35	26	22	15	19	22	27	18	16	25	262
Total Deaths from all causes	42	36	68	46	37	29	30	56	55	53	36	51	539

The following Table speaks for itself, and combines the information already furnished in Table VII., as well as a comparative view for a period of six years:—

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TABLE No. VIII.

Comparative view for six years		1894	1895	1896	1897	1898	1899
	Small Pox						
	Measles	2		67	10	13	
	Searlet Fever	11		7	16	10	2
	Diphtheria & Membranous Croup	10	3		3	8	7
	Whooping Cough... ..	5	3	17	18	20	3
	Continued { Enteric	9	5	10	10	15	15
	{ Typhus						
	Fever { Doubtful	2	1		1		1
	Puerperal Fever	2	3	2			3
	Diarrhœa and Dysentery...	12	46	19	44	30	53
	Erysipelas	4	1		1	1	3
	Total Deaths from Zy- motie Diseases	57	62	122	103	97	87
	Phthisis and Tubercular Diseases	33	44	64	56	46	66
	Rheumatic Fever	4		4	2	2	3
	Heart Disease	40	48	37	44	46	38
	Total Deaths from other causes	353	423	374	330	365	345
	Total Deaths from all causes	487	577	601	535	556	539

The next Table combines the information already given as to births and deaths, and their respective rates, and gives a comparative view for a series of ten years:—

TABLE No. IX.

Comparative view for ten years.	Year.	Births.	Deaths.	Birth Rate.	Death Rate	Zymotic Diseases	Zymotic Death Rate
	1890	845	584	27·22	18·90	71	2·29
	1891	846	701	28·67	24·42	93	3·14
	1892	772	618	26·89	21·53	128	4·45
	1893	829	695	28·53	24·21	149	5·19
	1894	854	487	29·73	16·95	53	1·84
	1895	829	577	28·58	19·89	58	2·00
	1896	887	601	29·95	20·29	120	4·05
	1897	850	535	27·12	17·07	102	3·25
	1898	855	556	26·73	17·44	96	3·01
	1899	867	539	26·72	16·61	81	2·49

The following is a Table of the Notifications of Infectious Diseases for the year :—

TABLE No. X.

1899.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTALS
Small Pox ..								1					1
Cholera ...													
Diphtheria ..	4	4	1	1	1	1	2	2	3	5	3	5	32
Membranous Croup				1									1
Erysipelas ...	3	3	3	2	2	3		3	2	7	1	2	31
Scarlet Fever ...	9	5	6	6	11	4	3	2	3	8	5	2	64
Typhus Fever ...													
Typhoid Fever ...	2	3	2			1	2	1	8	7	6	14	46
Enteric Fever ...		2						1	5	12	5	2	27
Relapsing Fever ...													
Continued Fever...				1			1		2	2	1		7
Puerperal Fever ...					1					1	1		3
Totals	18	17	12	11	15	9	8	10	23	42	22	25	212

There were 326 notifications in 1898, so that we have been very lightly affected with infectious disease during 1899. In 1899 there were 31 deaths from Notifiable Diseases, equivalent to a mortality of 14·6 per cent of Notified cases, as compared with 10·4 in 1898, 13·7 in 1897, 8·1 in 1896, 7·5 in 1895 and 17·2 in 1894.

GENERAL SURVEY OF INFECTIOUS DISEASES.

Small Pox. A mild case of this disease was notified in August, and was at once removed to the Isolation Hospital. The practitioner in attendance vaccinated the other inmates of the house which was thoroughly disinfected.

Measles. There were no deaths from this disease, as compared with 13 in 1898.

Scarlet Fever. There were 2 deaths and 64 notifications.

Diphtheria and Croup. There were 7 deaths and 33 notifications.

Whooping Cough. There were 3 deaths.

Typhoid Fever.	There were 15 deaths and 73 notifications.
Continued Fever.	There was 1 death and 7 notifications.
Diarrhoea and Dysentery.	There were 53 deaths as compared with 30 in 1898.
Erysipelas.	There were 3 deaths and 31 notifications.
Puerperal Fever.	There were 3 deaths and 3 notifications.
Cow Sheds, Slaughter Houses &c.	These have been visited, and found satisfactory.
Town's Water.	This has been uniformly good.

Visits Paid.

During the past year, I have visited a considerable number of premises, to make inquiries as to the causation, nursing and disinfection of Typhoid Cases. I paid numerous visits to inspect the property at Mount Pleasant where Typhoid broke out. I also visited with our Inspector, nearly every back-yard in Queen Street, also premises in Warwick Road, and have along with him, and also again with the Committee inspected several houses considered unfit for human habitation, and have signed notices for their closure or putting into good repair. At the time of the visit of the Hull Football Club, I also communicated with the Medical Officer of Hull, and tried to stop the Club from playing here, but my efforts were fruitless, as were also those of several other Medical Officers residing in the West Riding, who moved in the same direction.

As regards Sanitary work done in the Town, full particulars will be found in the Inspectors report lately issued.

SANITARY REQUIREMENTS OF THE BOROUGH.

I would urge a continuation of the Council's policy under which the paving, asphaltting, or concreting of yards is insisted upon, considerable progress has recently been made in this direction, notably in Queen Street.

We are still without that sufficient accommodation for the isolation of Typhoid and Scarlatina cases which I should like to see.

In conclusion, I have to express the hope that 1900 will be a prosperous, happy and healthy year for the Borough of Batley.

I am, Gentlemen,

Yours obediently,
J. A. ERSKINE STUART,
L.R.C.P. Edin., L.R.C.S., Edin.
MEDICAL OFFICER OF HEALTH.

BATLEY,
FEBRUARY 27th, 1900.